2016

Animal Science E-Newsletter, August 2016

University of Arkansas, Fayetteville. Department of Animal Sciences

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Animal Science E-Newsletter

U of A DIVISION OF AGRICULTURE RESEARCH & EXTENSION
University of Arkansas System

UNIVERSITY OF ARKANSAS
Dale Bumpers College of Agricultural, Food & Life Sciences

Agroforestry Research Seeks to Educate About Climate Change

Agroforestry research taking place in the Department of Animal Science at the University of Arkansas is aiming to predict the growth of trees and the accumulation of carbon in relation to climate change and carbon sequestration.

The agroforestry study is multi-disciplinary, collaborative research between the USDA National Laboratory for Agriculture and the Environment, the University of Missouri, and the University of Arkansas. The research is led by soil scientist Tom Sauer, with the cooperation of horticulturist Andy Thomas, who cares for the trees, and forage agronomist Dirk Philipp, who manages forage in the tree rows. All participants are working closely together to achieve the project's goals; a cooperative agreement was implemented in 2015 to ensure active cooperation for the next several years.

Several rows of trees consisting of pecan, oak, sycamore, cottonwood, and pine species were established at the North Farm in Fayetteville, AR in 1999.

Other than the central goal of the study, they also hope to investigate how the agroforestry system affects the local microclimate. The lower temperatures provided by tree shade could create a more suitable microclimate for certain forage species, especially during times of global warming.

Forage research will focus on interrelated soil quality in both orchardgrass and native grass areas. Orchardgrass was established in the orchards in the fall of 2015 and is grazed by livestock frequently. Native grasses--mostly big bluestem--were established in the spring of 2016 and will be grazed next year. The grasses act as buffer strips and diversified habitat for wildlife.

The site will also be used for displaying and promoting best management practices for forage production, native grass establishment, and ecosystem services. Video footage is being recorded to document the progress of the project. The video project is spearheaded by Dirk Philipp, who aims to create educational forage production videos in agroforestry settings, as well as to inform the public of the importance of ecosystems services in food production. }

Dirk Philipp video interviews Tom Sauer at the agroforestry research site about the project.

Molding Future Arkansas Veterinarians Through 4-H

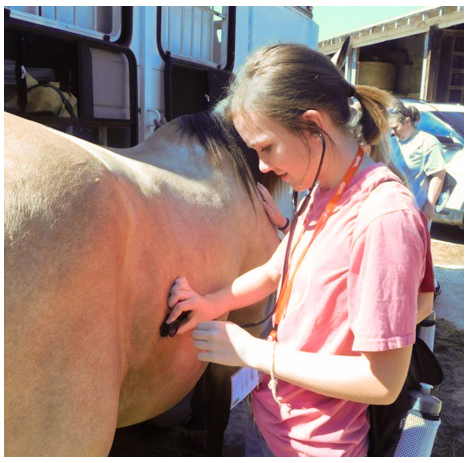
The Arkansas 4-H Veterinary Science Program has grown exponentially in the past year under the direction of Assistant Professor and Veterinarian Heidi Ward.

Along with partnering with the Arkansas Veterinary Medical Association, the program has also recruited talented veterinarians from across the state to provide hands-on learning for students at the 2016 Veterinary Science Camp.

Fifty-five 4-H students, ages 11-18, converged on the Arkansas Tech University campus in Russellville, Arkansas from June 27th-29th. This was the second year for the camp, which began with a discussion between the students and a panel of veterinarians consisting of the Arkansas State Veterinarian, a USDA veterinarian, a poultry veterinarian from Butterball, a mixed animal veterinarian, the University of Arkansas Extension veterinarian, and an animal pharmaceutical representative.

Students were then educated in the different career paths for veterinary medicine, including private, public, and industry medicine, as well as novel careers such as veterinary chiropractic and zoo medicine.

Students were also taught the principles of sound biosecurity and acquired practical veterinary examination skills. Examinations skills taught included taking cattle body temperatures, listening to gut sounds on horses, examining feet on sheep and horses, and properly restraining piglets, dogs, and cats.



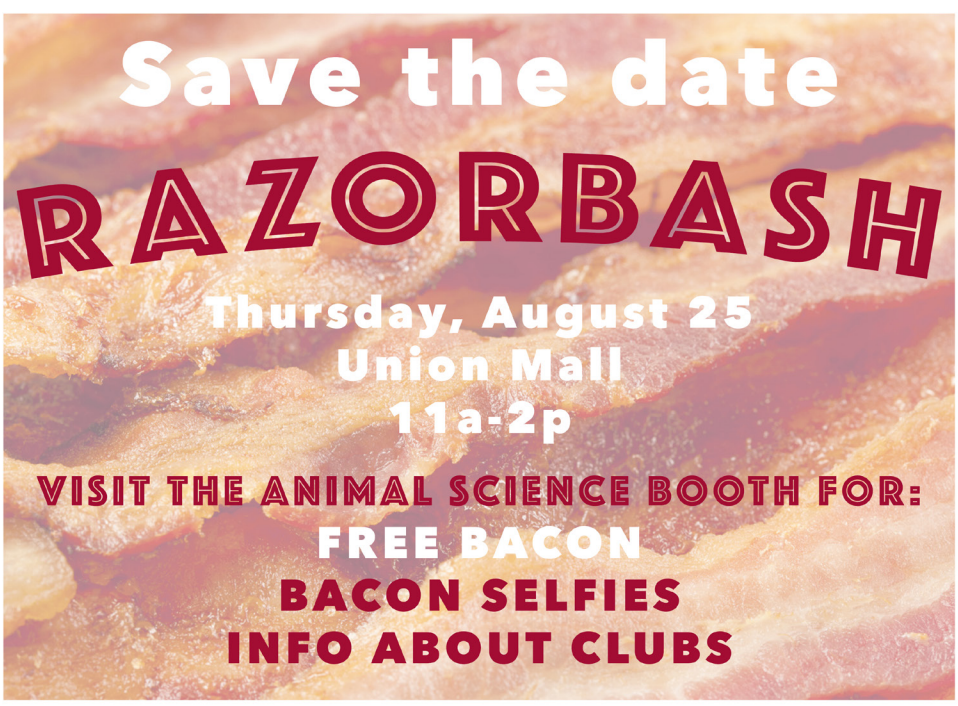
A student at Veterinary Science Camp learns how to evaluate the gut sounds of a horse.

In the classroom, students learned the fundamentals of veterinary dentistry, chicken necropsy, cell anatomy, and sheep eye anatomy.

Throughout the camp, students were given hands-on opportunities to experience various veterinary career options by touring the Azzore Veterinary Specialists and Tyson hatchery. They also participated in evening programs with Durham House Working Dogs and the Lake Dardanelle State Park Snake Program.

The participation of eleven veterinarians, two veterinary technicians, and five veterinary assistants from various fields of veterinary medicine made the camp a resounding success. A post camp survey revealed that 98% of the participating campers agreed that they would attend veterinary science camp again.

Arkansas does not have a veterinary school, which makes the dream of pursuing a veterinary degree seem out of reach for many Arkansas youth. The Arkansas 4-H Veterinary Science Program strives to aid students in the journey of pursuing a veterinary career in order to build a stronger veterinary workforce in Arkansas, which will in turn drive the animal agriculture industry. }



Incoming Animal Science Freshmen Settle into Dorms

Fall classes begin on August 22nd! While Department of Animal Science faculty and staff have been preparing for the incoming rush of new and returning students for the past few weeks, incoming freshmen have been settling into their new homes. We have an enthusiastic and promising incoming class, and we are anxious to see the amazing things the Class of 2020 is capable of! }

Incoming Honors Freshmen enjoy lunch with faculty advisors during orientation in June.